NO 1 JULY 1982

## Neurological Progress

1 **Kuru with Incubation Periods Exceeding Two Decades**
*Stanley B. Prusiner, MD, D. Carleton Gajdusek, MD, and Michael P. Alpers, MD*

## Original Articles

10 **Misonidazole Neuropathy: A Clinical, Electrophysiological, and Histological Study**
*B. Melgaard, MD, H. Sand Hansen, MD, Z. Kamieniecka, MD, O. B. Paulson, MD, A. Gersel Pedersen, MD, Xiaofu Tang, MD, and W. Trojaborg, MD*

18 **Long-Term Management of Respiratory Failure in Amyotrophic Lateral Sclerosis**
*Edward D. Sivak, MD, W. Terry Gipson, MD, and Maurice R. Hanson, MD*

24 **Hind Limb Somatosensory Evoked Potentials in the Monkey: The Effects of Distal Axonopathy**
*J. C. Arezzo, PhD, H. H. Schaumburg, MD, H. G. Vaughan, Jr, MD, P. S. Spencer, PhD, and J. Barna, BA*

33 **A Variant Form of Metachromatic Leukodystrophy without Arylsulfatase Deficiency**
*Angelika F. Hahn, MD, Bruce A. Gordon, MD, PhD, Vera Feleki, George G. Hinton, MD, and Joseph J. Gilbert, MD*

37 **Neurotransmitter Chemistry in Feline $GM_1$ Gangliosidosis: A Model for Human Ganglioside Storage Disease**
*Harvey S. Singer, MD, Joseph T. Coyle, MD, Debbie L. Weaver, MS, Nariko Kawamura, PhD, and Henry J. Baker, DVM*

42 **Burn Encephalopathy in Children**
*Dhanpat Mohnot, MD, O. Carter Snead, III, MD, and John W. Benton, Jr, MD*

48 **Stability of Monoamine Metabolites in Human Cerebrospinal Fluid**
*Philip J. Langlais, MA, Edward D. Bird, MD, and William J. McEntee, MD*

52 **Dopamine and Homovanillic Acid Concentrations in Striatal and Limbic Regions of Human Brain**
*Francis X. Walsh, BA, Thomas J. Stevens, BA, Philip J. Langlais, MA, and Edward D. Bird, MD*

56 **Neuroimmunomodulation: Neural Anatomical Basis for Impairment and Facilitation**
*William H. Brooks, MD, Richard J. Cross, PhD, Thomas L. Roszman, PhD, and William R. Markesbery, MD*

## Letters

62 **Amitriptyline: Another Cause of Internuclear Ophthalmoplegia with Coma**
*John R. Hotson, MD, and Harmeet S. Sachdev, MD*

62 **Drugs for Cataplexy**
*C. Thompson, MRCPsych, M. Schachter, MRCP, and J. D. Parkes, FRCP*

63 **Reply**
*Arthur Foutz, PhD, John Delashaw, Jr, BS, Christian Guilleminault, MD, and William C. Dement, MD, PhD*

64 **Does Papaverine Affect Brain Dopamine?**
*Roland J. Branconnier, MA, Jonathan O. Cole, MD, and Sasan Ghazvinian, MD*

## Regular Departments

**107th Annual Meeting of the American Neurological Association**
65 **Program**
74 **Abstracts**

41 **Notice from the Editor**
118 **Books**

NO 2 AUGUST 1982

## Neurological Progress

119 **Neurological Complications of Immunization**
*Gerald M. Fenichel, MD*

## Original Articles

129 **The Role of the Limbic System in Experiential Phenomena of Temporal Lobe Epilepsy**
*Pierre Gloor, MD, PhD, André Olivier, MD, PhD, Luis F. Quesney, MD, PhD, Frederick Andermann, MD, and Sandra Horowitz, MD*

145 **Prostaglandin $I_2$, Indomethacin, and Heparin Promote Postischemic Neuronal Recovery in Dogs**
*J. M. Hallenbeck, MD, D. R. Leitch, MB, PhD, A. J. Dutka, MD, L. J. Greenbaum, Jr, PhD, and A. E. McKee, DVM*

157 **Dexamethasone and Local Cerebral Glucose Utilization in Freeze-traumatized Rat Brain**
*H. M. Pappius, PhD*

163 **A New Autoradiographic Approach for Imaging Forebrain Dopamine Distribution**
*G. Frederick Wooten, MD, and Malcolm K. Horne, MBBS, PhD, FRACP*

169 **Pathological Features of Persistent Infantile Sleep Apnea with Reference to the Pathology of Sudden Infant Death Syndrome**
*Dawna Armstrong, MD, Paul Sachis, MA, Charles Bryan, MD, and Larry Becker, MD*

175 **Neurotoxicity of the Pyrimidine Synthesis Inhibitor N-Phosphonoacetyl-L-Aspartate**
*R. G. Wiley, MD, PhD, R. J. Gralla, MD, E. S. Casper, MD, and N. Kemeny, MD*

## Brief Communications and Case Reports

184 **Decreased Serum 24,25-Dihydroxyvitamin D Concentration during Long-term Anticonvulsant Therapy in Adult Epileptics**
*Joseph E. Zerwekh, PhD, Richard Homan, MD, Richard Tindall, MD, and Charles Y. C. Pak, MD*

186 **Biopsy-proved Alzheimer Disease Presenting as a Right Parietal Lobe Syndrome**
*Howard A. Crystal, MD, Dikran S. Horoupian, MD, Robert Katzman, MD, and Seymour Jotkowitz, MD*

## Notes and Letters

227 **Uncinate Seizures and Tumors, a Myth Reexamined**
*J. G. Howe, MRCP (UK), and J. D. Gibson, MD*

227 **Drug-induced Downbeat Nystagmus**
*Steve D. Wheeler, MD, R. Eugene Ramsay, MD, and Jacquelyn Weiss, MD*

228 **Cerebrospinal Fluid Xanthochromia with Rifampin**
*Stephen B. Liggett, MD, Joseph R. Berger, MD, and Jubran Hush, MD*

229 **Mania-induced Remission of Tardive Dyskinesia in Manic-Depressive Illness**
*William J. Weiner, MD, and Thomas R. Werner, MD*

230 **Unilateral Midbrain Lesion and Sylvian Aqueduct Syndrome**
*Stephen H. Rudolph, MD, and Charles B. Stacy, MD*

230 **Reply**
*Stanford Auerbach, MD*

## Regular Departments

**Eleventh Annual Meeting of the Child Neurology Society**
191 Program
196 Abstracts

189 **Books**

NO 3 SEPTEMBER 1982

## Neurological Progress

231 **Treatment of Neuroectodermal Brain Tumors**
*William R. Shapiro, MD*

## Original Articles

238 **The Laboratory Diagnosis of Mild Myasthenia Gravis**
*John J. Kelly, Jr, MD, Jasper R. Daube, MD, Vanda A. Lennon, MD, PhD, Frank M. Howard, Jr, MD, and Brian R. Younge, MD*

243 **Pergolide in Late-Stage Parkinson Disease**
*A. E. Lang, MD, N. Quinn, MB, S. Brincat, MB, C. D. Marsden, MD, and J. D. Parkes, MD*

248 **The Localizing Value of Depth Electroencephalography in 32 Patients with Refractory Epilepsy**
*Susan S. Spencer, MD, Dennis D. Spencer, MD, Peter D. Williamson, MD, and Richard H. Mattson, MD*

254 **Alcohol and Parkinson Disease**
*A. E. Lang, MD, C. D. Marsden, MD, J. A. Obeso, MD, and J. D. Parkes, MD*

257 **Tetrabenazine Has Properties of a Dopamine Receptor Antagonist**
*Ivan S. Login, MD, Michael J. Cronin, PhD, and Robert M. MacLeod, PhD*

263 **A Defect in Catecholamine Metabolism in Kinky-Hair Disease**
*Warren D. Grover, MD, Robert I. Henkin, MD, Michael Schwartz, BS, Nancy Brodsky, PhD, Elizabeth Hobdell, RN, MSN, and Jon M. Stolk, MD*

267 **3-*O*-Methyldopa Blocks Dopa Metabolism in Rat Corpus Striatum**
*Avinoam Reches, MD, and Stanley Fahn, MD*

272 **Characterization of 5-Hydroxytryptamine Receptors in Human Temporal Arteries: Comparison between Migraine Sufferers and Nonsufferers**
*Tor Skärby, BM, Peer Tfelt-Hansen, MD, Flemming Gjerris, MD, Lars Edvinsson, MD, PhD, and Jes Olesen, MD*

278 **Neurofibrillary Axonal Pathology in Aluminum Intoxication**
*Juan C. Troncoso, MD, Donald L. Price, MD, John W. Griffin, MD, and Irma M. Parhad, MD*

284 **Cataplexy in Variant Forms of Niemann-Pick Disease**
*Raymond S. Kandt, MD, Ronald G. Emerson, MD, Harvey S. Singer, MD, David L. Valle, MD, and Hugo W. Moser, MD*

289 **Complement Activation in Muscle Fiber Necrosis: Demonstration of the Membrane Attack Complex of Complement in Necrotic Fibers**
*Andrew G. Engel, MD, and Gregory Biesecker, PhD*

297 **Peripheral Nervous System Complications of Coronary Artery Bypass Graft Surgery**
*Richard J. Lederman, MD, PhD, Anthony C. Breuer, MD, Maurice R. Hanson, MD, Anthony J. Furlan, MD, Floyd D. Loop, MD, Delos M. Cosgrove, MD, F. George Estafanous, MD, and Richard L. Greenstreet, PhD*

302 **Primitive Reflexes and Cognitive Function in the Elderly**
*William C. Koller, MD, PhD, Sander Glatt, MD, Robert S. Wilson, PhD, and Jacob H. Fox, MD*

## Brief Communications and Case Reports

305 **Concanavalin A Binding of the Cell Surface of Duchenne Muscle in Vitro**
*Terry D. Heiman-Patterson, MD, Eduardo Bonilla, MD, and Donald L. Schotland, MD*

308 **Sleep-induced Nonobstructive Hypoventilation Associated with Diaphragmatic Paralysis**
*Michael J. Thorpy, MB, ChB, Wolfgang W. Schmidt-Nowara, MD, Charles P. Pollak, MD, and Elliot D. Weitzman, MD*

311 **Involuntary Movements in Chorea-Acanthocytosis: A Comparison with Huntington's Chorea**
*Hiroshi Shibasaki, MD, Tetsuo Sakai, MD, Hiroyuki Nishimura, MD, Yuji Sato, MD, Ikuo Goto, MD, and Yoshigoro Kuroiwa, MD*

314 **Entrapment of the Suprascapular Nerve at the Spinoglenoid Notch**
*I. Aiello, G. Serra, G. C. Traina, and V. Tugnoli*

## Letters

317 **Diagnostic Considerations in Alzheimer Disease: Predictive Value of Intrusion Errors As a Differential Diagnostic Sign of Alzheimer Disease**
*Roland J. Branconnier, MA*

317 **Neuropathological Basis for Diagnosis of Alzheimer's Disease**
*Meta A. Neumann, MS, and Robert Cohn, MD*

318 **Reply**
*Paula Altman Fuld, PhD, Robert Katzman, MD, Peter Davies, PhD, and Robert D. Terry, MD*

319 **Peripheral Neuropathy, Plasma Cell Dyscrasia, and Hot Blood**
*William H. Sherman, MD, Elliott F. Osserman, MD, Norman Latov, MD, PhD, Marcello R. Olarte, MD, and Lewis P. Rowland, MD*

## Regular Departments

320 **Books**

NO 4 OCTOBER 1982

## Neurological Progress

321 **Catecholamine Neuron Systems in Brain**
*Robert Y. Moore, MD, PhD*

## Original Articles

328 **Acute Neurological Dysfunction Associated with Destructive Lesions of the Basal Ganglia in Children**
*F. Goutières, MD, and J. Aicardi, MD*

333 **Local Cerebral Glucose Utilization in the Newborn Macaque Monkey**
*C. Kennedy, MD, O. Sakurada, MD, M. Shinohara, MD, and M. Miyaoka, MD*

341 **Immune Regulation in Myasthenia Gravis: Evidence for an Increased Suppressor T-Cell Population**
*Andrea E. Miller, BS, James Hudson, BS, and Richard S. A. Tindall, MD*

348 **Electrophysiological and Clinical Correlation in Myasthenia Gravis**
*Shin J. Oh, MD, Nasrollah Eslami, MD, Takeo Nishihira, MD, P. K. Sarala, MD, Tadashi Kuba, MD, Robert S. Elmore, MD, Il Nam Sunwoo, MD, and Young Il Ro, MD*

355 **Use of SEPs to Localize Degeneration in a Rare Polyneuropathy: Studies on Polyneuropathy Associated with Pigmentation, Hypertrichosis, Edema, and Plasma Cell Dyscrasia**
*Hiroshi Shibasaki, MD, Akio Ohnishi, MD, and Yoshigoro Kuroiwa, MD*

361 **Dopaminergic Dysfunction in Tourette Syndrome**
*Harvey S. Singer, MD, Ian J. Butler, MB, FRACP, Larry E. Tune, MD, William E. Seifert, Jr, PhD, and Joseph T. Coyle, MD*

367 **Reciprocal Excitation of Antagonistic Muscles as a Differentiating Feature in Spasticity**
*Barbara M. Myklebust, MS, Gerald L. Gottlieb, PhD, Richard D. Penn, MD, and Gyan C. Agarwal, PhD*

375 **Treatment of the "On-Off" Phenomenon in Parkinsonism with Lithium Carbonate**
*C. Edward Coffey, MD, Donald R. Ross, MD, E. L. Ferren, BS, John L. Sullivan, MD, and C. Warren Olanow, MD*

380 **Ross River Virus–induced Demyelination: I. Pathogenesis and Histopathology**
*Alan R. Seay, MD, and Jerry S. Wolinsky, MD*

## Brief Communications and Case Reports

390 **A Placebo-controlled Trial Shows No Effect of Vasopressin on Recovery from Closed Head Injury**
*Walter H. Reichert, MD, and John P. Blass, MD, PhD*

393 **Locked-in Syndrome in Multiple Sclerosis with Sparing of the Ventral Portion of the Pons**
*Alberto Forti, MD, Giovanni Ambrosetto, MD, Mario Amore, MD, Roberto De Maria, MD, Roberto Michelucci, MD, Ebe Omicini, MD, Nicola Rizzuto, MD, F. Fenzi, MD, and Carlo Alberto Tassinari, MD*

395 **Facioscapulohumeral Dystrophy Associated with Hearing Loss and Coats Syndrome**
*Donald A. Taylor, MD, James E. Carroll, MD, Morton E. Smith, MD, Mary O. Johnson, MD, Glen P. Johnston, MD, and Michael H. Brooke, MD*

398 **Inflammatory Facioscapulohumeral Muscular Dystrophy and Coats Syndrome**
*John D. Wulff, MD, James T. Lin, MD, and John J. Kepes, MD*

## Notes and Letters

402 **Treatment of "On-Off" Phenomena with Lithium**
*Abraham Lieberman, MD, and Govindan Gopinathan, MD*

402 **Continuum of Intellectual Deficit in Parkinson Disease**
*James A. Mortimer, PhD, Edward C. Hansch, MA, Francis J. Pirozzolo, PhD, and David D. Webster, MD*

403 **Reply**
*François Boller, MD, PhD*

404 **Primary Pontine Hemorrhage with Fenestration of the Basilar Artery**
*Kazuyoshi Morimoto, MD, Masaaki Sokawa, MD, Tsuyoshi Sugimoto, MD, and Heitaro Mogami, MD*

405 **Hiccup with Dexamethasone Therapy**
*Peter A. LeWitt, MD, Norman W. Barton, MD, and Jerome B. Posner, MD*

406 **Transient Areflexia and Quadriplegia following Metrizamide Myelography**
*Stephen J. Peroutka, MD, PhD, Christopher G. Ullrich, MD, Robert S. Fisher, MD, PhD, Richard A. Suss, MD, and Benjamin R. Brooks, MD*

407 **Amelioration of Hemiballismus with Sodium Valproate**
*Vijay Chandra, MD, PhD, Seth Wharton, MD, and Avery L. Spunt, Pharm B*

## Regular Departments

408 **Books**

NO 5 NOVEMBER 1982

## Neurological Progress

409 **Neurobiological Correlates of Learning Disabilities**
*Gerald S. Golden, MD*

## Original Articles

419 **Spinocerebellar Degeneration Secondary to Chronic Intestinal Malabsorption: A Vitamin E Deficiency Syndrome**
*A. E. Harding, MD, D. P. R. Muller, PhD, P. K. Thomas, DSc, and H. J. Willison, MB*

425 **Cerebral Metabolism and Atrophy in Huntington's Disease Determined by $^{18}$FDG and Computed Tomographic Scan**
*David E. Kuhl, MD, Michael E. Phelps, PhD, Charles H. Markham, MD, E. Jeffrey Metter, MD, Walter H. Riege, PhD, and James Winter, MD, PhD*

435 **Tomographic Mapping of Human Cerebral Metabolism: Sensory Deprivation**
*John C. Mazziotta, MD, PhD, Michael E. Phelps, PhD, Richard E. Carson, and David E. Kuhl, MD*

445 **Selective Reduction of Blood Flow to White Matter during Hypotension in Newborn Dogs: A Possible Mechanism of Periventricular Leukomalacia**
*Richard S. K. Young, MD, Milton J. Hernandez, PhD, and Susan K. Yagel, BS*

449 **Neonatal-onset Adrenoleukodystrophy in a Girl**
*Joel E. Haas, MD, Edward Stidworthy Johnson, MD, FRCP(C), and Donald L. Farrell, MD*

458 **Pseudoepileptic Seizures: Methods and Video Analysis to Aid Diagnosis**
*J. Scott Luther, MD, James O. McNamara, MD, Sandra Carwile, RN, Patricia Miller, RN, and Victor Hope, REEGT*

463 **Mood, Vegetative Disturbance, and Dexamethasone Suppression Test after Stroke**
*Seth Finklestein, MD, Larry I. Benowitz, PhD, Ross J. Baldessarini, MD, George W. Arana, MD, David Levine, MD, Elaine Woo, MD, David Bear, MD, Kenneth Moya, BA, and Andrew L. Stoll, BA*

469 **Persistent Oligemia of Rat Cerebral Cortex in the Wake of Spreading Depression**
*Martin Lauritzen, MD, Martin Balslev Jørgensen, MD, Niels Henrik Diemer, MD, Albert Gjedde, MD, and Anker Jón Hansen, MD*

475 **Voluntary Alteration of Visual Evoked Potentials**
*James Bumgartner, MD, and Charles M. Epstein, MD*

479 **Effect of Folic Acid and Vitamin $B_{12}$ Deficiencies on 5-Hydroxyindoleacetic Acid in Human Cerebrospinal Fluid**
*M. I. Botez, MD, Simon N. Young, PhD, Jocelyne Bachevalier, PhD, and Serge Gauthier, MD*

## Brief Communications

485 **Impaired Biotin Status in Anticonvulsant Therapy**
*Klaus-Henning Krause, MD, Peter Berlit, MD, and Jean-Pierre Bonjour, PhD*

486 **Correlation of Isotopic Cisternographic Patterns in Multiple Sclerosis with CSF IgG Values**
*S. Bartolini, MD, D. Inzitari, MD, A. Castagnoli, MD, and L. Amaducci, MD*

489 **Intravascular Malignant Histiocytosis Mimicking Central Nervous System Vasculitis: An Immunopathological Diagnostic Approach**
*C. Krieger, MD, Y. Robitaille, MD, S. Jothy, MD, PhD, and G. Elleker, MD*

## Notes and Letters

493 **Motor Neuropathy in a Patient with Legionnaires' Disease**
*Patti L. Holliday, MD, Paul A. Cullis, MD, and John Gilroy, MD*

494 **Alzheimer Disease: Plaques, Tangles, and the Basal Forebrain**
*Peter J. Whitehouse, MD, PhD, Robert G. Struble, PhD, Arthur W. Clark, MD, and Donald L. Price, MD*

494 **Clusters of Tonic Spasms as an Initial Manifestation of Multiple Sclerosis**
*Peter D. Heath, MSc, MRCP, and Simon Nightingale, BSc, MRCP*

495 **Bechterew's Phenomenon in a Human Patient**
*David S. Zee, MD, Thomas J. Preziosi, MD, and Leonard R. Proctor, MD*

496 **Voluntary Alteration of Evoked Potentials?**
*Keith H. Chiappa, MD, and Con Yiannikas, MD*

497 **Reply**
*James Bumgartner, MD, and Charles M. Epstein, MD*

## Regular Departments

498 **Books**

NO 6 DECEMBER 1982

## Neurological Progress

499 **Neuroimmunology II: Antigenic Specificity of the Nervous System**
*Howard L. Weiner, MD, and Stephen L. Hauser, MD*

## Original Articles

510 **Interictal Cerebral Glucose Metabolism in Partial Epilepsy and Its Relation to EEG Changes**
*Jerome Engel, Jr, MD, PhD, David E. Kuhl, MD, Michael E. Phelps, PhD, and John C. Mazziotta, MD, PhD*

518 **Pathological Findings Underlying Focal Temporal Lobe Hypometabolism in Partial Epilepsy**
*Jerome Engel, Jr, MD, PhD, W. Jann Brown, MD, David E. Kuhl, MD, Michael E. Phelps, PhD, John C. Mazziotta, MD, PhD, and Paul H. Crandall, MD*

529 **Comparative Localization of Epileptic Foci in Partial Epilepsy by PCT and EEG**
*Jerome Engel, Jr, MD, PhD, David E. Kuhl, MD, Michael E. Phelps, PhD, and Paul H. Crandall, MD*

538 **Childhood Brain Tumors Presenting as Chronic Uncontrolled Focal Seizure Disorders**
*Warren T. Blume, MD, FRCP(C), John P. Girvin, MD, FRCS(C), and John C. E. Kaufmann, MB, ChB, FRCPath*

542 **The Origin of Fasciculations**
*G. Roth, MD*

548 **Progression of Carotid Disease after Endarterectomy: A Doppler Ultrasound Study**
*Bo Norrving, MD, Bengt Nilsson, MD, and Jan-Edvin Olsson, MD*

553 **Abnormal Brainstem Auditory Evoked Potentials in Chronic Paint Sniffers**
*Scott A. Metrick, MD, and Richard P. Brenner, MD*

557 **Diffuse Axonal Injury due to Nonmissile Head Injury in Humans: An Analysis of 45 Cases**
*J. Hume Adams, FRCPath, D. I. Graham, MRCPath, Lilian S. Murray, BSc, and Grace Scott, MBChB*

564 **Diffuse Axonal Injury and Traumatic Coma in the Primate**
*Thomas A. Gennarelli, MD, Lawrence E. Thibault, ScD, J. Hume Adams, MB, PhD, FRCPath, David I. Graham, MB, PhD, MRCPath, Carson J. Thompson, MD, and Robert P. Marcincin, MD*

## Brief Communications and Case Reports

575 **Self-grasping: A Focal Neurological Sign**
*Allan H. Ropper, MD*

578 **Superior Sagittal Sinus Thrombosis Associated with Androgen Therapy for Hypoplastic Anemia**
*Zenji Shiozawa, MD, Hideo Yamada, MD, Chiyuki Mabuchi, MD, Tomomitsu Hotta, MD, Masaru Saito, MD, Itsuro Sobue, MD, and Yun Peng Huang, MD*

580 **Blink Rates in Parkinsonism**
*Craig N. Karson, MD, Peter A. LeWitt, MD, Donald B. Calne, MD, and Richard Jed Wyatt, MD*

## Letters

584 **Periodic Paralysis**
*William W. Hofmann, MD*
585 **Reply**
*Robert B. Layzer, MD*

585 **Iris Pigmentation in Idiopathic Dystonia**
*Anthony E. Lang, MD, Christopher Ellis, MD, Heather Kingon, MD, and C. David Marsden, MD*
586 **Reply**
*Julius Korein, MD*

## Indexes to Volume 12

587 **Author Index**
592 **Subject Index**

## Regular Departments